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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,748	11/09/2001	Kenji Uchida	NEC-5084-US	5987

21254 7590 02/06/2006

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EXAMINER

NGO, CHUONG D

ART UNIT	PAPER NUMBER
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2193

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/986,748

Applicant(s)

UCHIDA, KENJI

Examiner

Chuong D. Ngo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 10-13, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10-13, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-4,10-13,19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1, last line, the recitation that “said extracted bits are accepted as representing the maximum values” is misdescriptive and thus is indefinite as to what it is intended to claim. According to the disclosure on page 14 of the specification which discloses an overflow in #2 , line 18, having a mantissa part being 0110 0000, and the corresponding overflow extracted bits should be 0100, and by a saturation process, line 28, the overflow values is represented by a maximum value of 0111. It is not the extracted bits being accepted as representing the maximum value as claimed. Claim 10 also has the same problem.

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 10-13,19 and 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 10-13,19 and 20 are directed to a computer related process that perform data computations and manipulation to produces results are mere number. In order for a claimed invention that is directed to such a computer related process to be statutory, the claims must limit the invention to a practical application. That is the claimed invention must transform an article

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or physical object to a different state or thing, or produces a useful, concrete and tangible result.

It is clear from the claims that the process does not transform an article or physical object to a different state or thing, and the final result of the claimed method are mere numbers without a practical application recited in the claims that make the result useful, concrete and tangible.

Therefore, the method of claims 10-13, 19 and 20 are non-statutory subject matter as being directed to a computer related process without limiting the invention to a practical application.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 10-13, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozawa (JP 08-101919) in view of Blackham et al (5,619,198).

As per claims 1, 2, 10, 11, Ozawa discloses in figure 1, a floating-point to fixed-point conversion having a reference data determining means (11) for detecting a maximum value as a reference, an exponent subtractor and shifting means (12), and a bit extracting means (output of 12) as claimed. It is noted that Ozawa does not disclose a correction of an overflow output by representing the output by a maximum value. However, Blackham et al discloses in figure 1, a correction means (30) for correcting an overflow output from a floating-point/fixed-point conversion by representing the overflow output by a maximum value as claimed. It would have

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been obvious to a person of ordinary skill in the art to provides Ozawa with an overflow correction means as taught by Blackham et al. in order to reduce errors caused by overflow.

As per claims 19 and 20, the recitation of utilizing the fix point data generated by the method of claim 10 in a CDMA system, are a mere intended field of use that do not make the claimed invention distinct from that of Ozawa.

As per claims 3,4,12 and 13, Ozawa does not disclose the detecting a minimum or an average value for the reference as claimed. However, it is clearly equivalent to choose the minimum or the average instead of the maximum for the reference in the conversion of Ozawa. A person of ordinary skill in the art would have found it an obvious modification from the teaching of Ozawa to detect a minimum or an average instead of the maximum for the reference as claimed.

6. Claims 1-4,10-13,19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al (5,359,548) in view of Blackham et al (5,619,198).

As per claims 1,2,10 and 11, Yoshizawa et al discloses in figure 13, a floating-point to fixed-point conversion having a reference data determining means (20-22)) for detecting a maximum value as a reference, an exponent subtractor means (23), shifting means (24), and a bit extracting means (output of 24) as claimed.

As per claims 19 and 20, the recitation of utilizing the fix point data generated by the method of claim 10 in a CDMA system, are a mere intended field of use that do not make the claimed invention distinct from that of Yoshizawa et al.

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As per claims 3,4,12 and 13, Yoshizawa et al does not disclose the detecting a minimum or an average value for the reference as claimed. However, it is clearly equivalent to choose the minimum or the average instead of the maximum for the reference in the conversion of Yoshizawa et al. A person of ordinary skill in the art would have found it an obvious modification from the teaching of Yoshizawa et al to detect a minimum or an average instead of the maximum for the reference as claimed.

7. Applicant's arguments filed 11/14/2005 have been fully considered but they are not persuasive because the saturation process as disclosed represents an overflow extracted value by a maximum value, 0111, eg.. It is not representing a maximum value by the overflow extracted bits.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong D. Ngo whose telephone number is (571) 272-3731. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chuong D Ngo
Primary Examiner
Art Unit 2193

02/02/2006